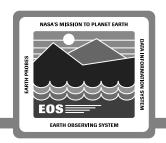
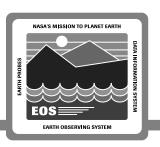
#### **CSMS Services**



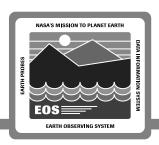
FOS will be using the CSMS CSS and MSS services listed below. Details of these services and their interfaces are to be presented at the CSMS PDR workshop in January.

#### **CSS Services**

- Security: Allows authorized users to access resources in a distributed computing environment securely and confidentially
  - Authentication
  - Authorization
  - Data Integrity
  - Encryption



- Message Passing: Clients and servers running on different platforms Interchange data
  - Synchronous
  - Asynchronous
  - Multicast
- Naming Service: Provides clients with the capability to uniquely identify services and retrieve location information to communicate with servers. Also, to store and retrieve association containing names and attribute / value(s) pairs.
- Time Service: Keeps system clocks of all nodes in synch. Operations include obtaining timestamps, translate among different time formats, and perform calculation on timestamps.
- File Transfer: Provides access to local and remote files.
- E-Mail Service: Provides functions to manage electronic mail messages.



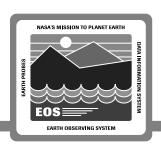
- History Logging: Allows applications to log event and history information to a database which can later be used for fault, performance or statistical analysis.
- Bulletin Board: Provides forum for sharing ECS related information.

#### **MSS Services:**

- Configuration Management: Provides the capabilities to manage baseline configuration changes, distribute software, manage licenses for commercial software, and real-time system management.
  - Software Change Management
  - Software Distribution
  - License Management
  - Baseline Management
  - Change Request Management
  - Startup and Shutdown



- Fault Management: Provides the capability to detect, isolate, diagnose and recover from faults occurring in network components, operating systems and applications
  - Fault Detection
  - Fault Isolation
  - Fault Diagnosis
  - Fault Recovery
- Security Management: Provides the management of security databases, compliance to established security policy, and the detection of intrusions.
  - Security Database Management
  - Compliance Management
  - Intrusion Detection



- Performance Management: Provides the capability to analyze the performance of network components, the operating system and software.
  - Monitoring
  - Analysis
  - Network Trending
- Accountability Management: Provides the capability to register new users (FOS Users), and the management of user audit trails
  - User Registration
  - User Audit Trails